

=> FILE REG

FILE 'REGISTRY' ENTERED AT 15:27:04 ON 22 APR 2009  
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=> DISPLAY HISTORY FULL L1-

FILE 'HCAPLUS' ENTERED AT 14:44:41 ON 22 APR 2009

L1 28 SEA SCHINABECK ?/AU  
L2 8981 SEA FRIEDRICH ?/AU  
L3 106 SEA GATTINGER ?/AU  
L4 0 SEA TSELIBIDIS ?/AU  
L5 8297 SEA ALBRECHT ?/AU  
L6 7773 SEA KERN ?/AU  
L7 1 SEA L1 AND L2 AND L3 AND L5 AND L6  
SEL RN

FILE 'REGISTRY' ENTERED AT 14:45:36 ON 22 APR 2009

L8 5 SEA (353238-75-2/BI OR 849835-06-9/BI OR 849835-07-0/BI

FILE 'HCA' ENTERED AT 14:48:12 ON 22 APR 2009

L9 10 SEA L8  
L10 443851 SEA CEMENT? OR CONCRET? OR MORTAR? OR MASONR? OR  
TERRAZZO? OR GROUT? OR LIME# OR GYPSUM# OR PLASTER? OR  
ANHYDRITE#  
L11 103524 SEA (CONSTRUCTION? OR BUILDING#) (2A) MATERIAL?  
L12 1 SEA L9 AND (L10 OR L11)

FILE 'LREGISTRY' ENTERED AT 14:51:14 ON 22 APR 2009

L13 STR  
L14 STR  
L15 STR L14

FILE 'REGISTRY' ENTERED AT 15:00:30 ON 22 APR 2009

L16 SCR 2043  
L17 50 SEA SSS SAM L13 AND L16  
L18 9352 SEA SSS FUL L13 AND L16  
SAV L18 PEZ993/A  
L19 3 SEA SUB=L18 SSS SAM L13 AND L14 AND L15  
L20 90 SEA SUB=L18 SSS FUL L13 AND L14 AND L15  
SAV L20 PEZ993A/A

FILE 'HCA' ENTERED AT 15:09:25 ON 22 APR 2009

L21 61 SEA L20

L22 7 SEA L21 AND (L10 OR L11)

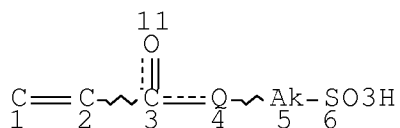
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L23 STR L15

FILE 'REGISTRY' ENTERED AT 15:13:04 ON 22 APR 2009  
L24 50 SEA SUB=L18 SSS SAM L13 AND L23  
L25 STR  
L26 STR  
L27 50 SEA SUB=L18 SSS SAM (L13 AND L23 NOT (L25 OR L26))  
L28 1219 SEA SUB=L18 SSS FUL (L13 AND L23 NOT (L25 OR L26))  
SAV L28 PEZ993B/A

FILE 'HCA' ENTERED AT 15:23:15 ON 22 APR 2009  
L29 690 SEA L28  
L30 14 SEA L29 AND (L10 OR L11)  
L31 7 SEA L12 OR L22  
L32 8 SEA L30 NOT L31  
L33 54 SEA L21 NOT (L31 OR L32)  
L34 3 SEA 1808-2003/PY,PRY,AY AND L31  
L35 4 SEA 1808-2003/PY,PRY,AY AND L32  
L36 41 SEA 1808-2003/PY,PRY,AY AND L33

FILE 'REGISTRY' ENTERED AT 15:27:04 ON 22 APR 2009

=> D L20 QUE STAT  
L13 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
GGCAT IS SAT AT 5  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE  
L14 STR



GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 8

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STEREO  ATTRIBUTES:  NONE
L15          STR
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GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 8

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STEREO ATTRIBUTES: NONE
L16          SCR 2043
L18          9352 SEA FILE=REGISTRY SSS FUL L13 AND L16
L20          90  SEA FILE=REGISTRY SUB=L18 SSS FUL L13 AND L14 AND L15
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100.0% PROCESSED      8018 ITERATIONS                      90 ANSWERS
SEARCH TIME: 00.00.01
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=> FILE HCA

FILE 'HCA' ENTERED AT 15:29:47 ON 22 APR 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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=> D L34 1-3 ALL HITSTR

L34 ANSWER 1 OF 3 HCA COPYRIGHT 2009 ACS on STN

AN 142:392853 HCA Full-text

ED Entered STN: 12 May 2005

TI Production of water-soluble, sulfonic group-containing copolymers  
for use as stabilizers for aqueous **building**  
**materials** and coatings

IN Schinabeck, Michael; Friedrich, Stefan; Gattinger, Irene;  
Tselebidis, Andreas; Albrecht, Gerhard; Kern, Alfred

PA Construction Research & Technology G.m.b.H., Germany

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM C08F220-38

ICS C04B024-16

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42, 58

FAN.CNT 1

|    | PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---------------|------|----------|-----------------|----------|
|    | -----         | ---- | -----    | -----           |          |
|    | -----         |      |          |                 |          |
| PI | WO 2005035603 | A1   | 20050421 | WO 2004-EP11786 | 20041018 |

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,  
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,  
KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,  
SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,  
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,  
DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,  
PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG

CA 2542617 A1 20050421 CA 2004-2542617

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18

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EP 1678223 A1 20060712 EP 2004-790611

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EP 1678223 B1 20070307

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

AT 356154 T 20070315 AT 2004-790611

200410  
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JP 2007533787 T 20071122 JP 2006-534722

200410  
18

<--

US 20070083020 A1 20070412 US 2006-572993

200603  
23

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PRAI DE 2003-10348502 A 20031018 <--

WO 2004-EP11786 W 20041018

AB The title polymers, which are economical, are prepd. by copolymn. of  
monomers bearing pendant sulfo groups of specified structure and have  
mol. wt. 50,000-20,000,000. Azo compd.-initiated photopolymn. of 450  
g 2-acrylamido-2-methyl-1-propanesulfonic acid with 331.5 g (2-  
methacrylamidopropyl)trimethylammonium chloride in the presence of  
NaOH (pH 6.0) at .apprx.5° gave a hard gel which was comminuted and  
dried at 90-120° in vacuo. Use of the polymer to stabilize self-  
thickening **concrete** is exemplified.

ST sulfonated polymer stabilizer **building material**;  
**concrete** stabilizer sulfonated polymer;  
acrylamidomethylpropanesulfonic acid copolymer stabilizer;  
methacrylamide quaternary ammonium deriv copolymer

IT **Concrete**

**Construction materials**

**Mortar**

(prodn. of water-sol., sulfonic group-contg. copolymers for use  
as stabilizers for aq. **building materials**)

IT Sulfonic acids, uses  
 (unsatd., copolymers with unsatd. quaternary ammonium salts;  
 prodn. of water-sol., sulfonic group-contg. copolymers for use as  
 stabilizers for aq. building materials and  
 coatings)

IT Quaternary ammonium compounds, uses  
 (unsatd., copolymers with unsatd. sulfonic acids; prodn. of  
 water-sol., sulfonic group-contg. copolymers for use as  
 stabilizers for aq. building materials and  
 coatings)

IT Coating materials  
 (water-thinned; prodn. of water-sol., sulfonic group-contg.  
 copolymers for use as stabilizers for aq. coatings)

IT 86828-39-9P 353238-75-2P 849835-06-9P  
 849835-07-0P 849835-08-1P  
 (prodn. of water-sol., sulfonic group-contg. copolymers for use  
 as stabilizers for aq. building materials and  
 coatings)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Albrecht, G; US 6187887 B1 2001 HCA  
 (2) Oswald, R; US 6395853 B1 2002 HCA

IT 86828-39-9P 353238-75-2P 849835-06-9P  
 849835-07-0P 849835-08-1P  
 (prodn. of water-sol., sulfonic group-contg. copolymers for use  
 as stabilizers for aq. building materials and  
 coatings)

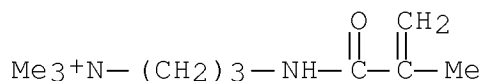
RN 86828-39-9 HCA

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-  
 propenyl)amino]-, chloride, polymer with  
 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI)  
 (CA INDEX NAME)

CM 1

CRN 51410-72-1

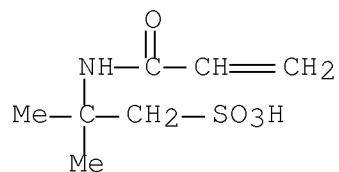
CMF C10 H21 N2 O . C1



CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S



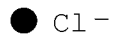
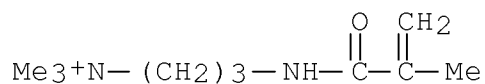
RN 353238-75-2 HCA

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 51410-72-1

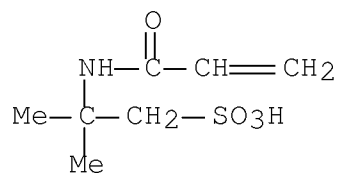
CMF C10 H21 N2 O . Cl



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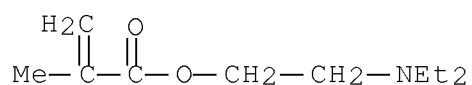
CMF C7 H13 N O4 S



CM 3

CRN 105-16-8

CMF C10 H19 N O2



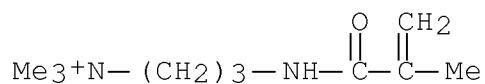
RN 849835-06-9 HCA

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 51410-72-1

CMF C10 H21 N2 O . Cl



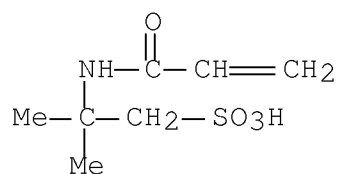
● Cl<sup>-</sup>

CM 2

CRN 15214-89-8

CMF C7 H13 N O4 S

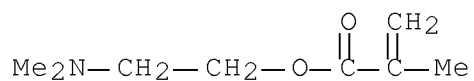




CM 3

CRN 2867-47-2

CMF C8 H15 N O2



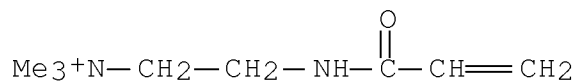
RN 849835-07-0 HCA

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-[(1,1-dimethylethyl)amino]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 74443-97-3

CMF C8 H17 N2 O . Cl

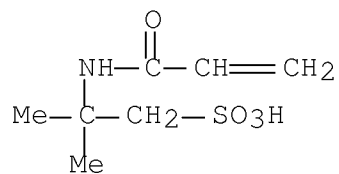


● Cl<sup>-</sup>

CM 2

CRN 15214-89-8

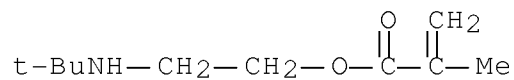
CMF C7 H13 N O4 S



CM 3

CRN 3775-90-4

CMF C10 H19 N O2



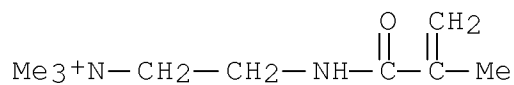
RN 849835-08-1 HCA

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 2-[(1,1-dimethylethyl)amino]ethyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 69174-85-2

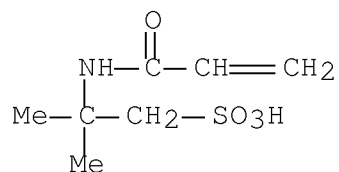
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

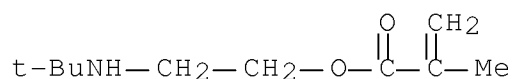
CM 2

CRN 15214-89-8  
CMF C7 H13 N O4 S



CM 3

CRN 3775-90-4  
CMF C10 H19 N O2



L34 ANSWER 2 OF 3 HCA COPYRIGHT 2009 ACS on STN  
AN 136:151598 HCA Full-text  
ED Entered STN: 28 Feb 2002  
TI Manufacture of water-soluble or water-swellaable copolymers  
containing sulfo groups as associative thickeners for  
**construction materials**  
IN Schinabeck, Michael; Albrecht, Gerhard; Kern, Alfred; Schuhbeck,  
Manfred; Melzer, Michaela  
PA Degussa Bauchemie G.m.b.H., Germany  
SO PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
IC ICM C08F020-00  
ICS C08F220-00  
CC 35-4 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 58  
FAN.CNT 1

| PATENT NO. | KIND | DATE  | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|------|
| -----      | ---- | ----- | -----           |      |
| -----      |      |       |                 |      |

|                |               |  |          |                  |              |
|----------------|---------------|--|----------|------------------|--------------|
| PI             | WO 2002010229 | A1   | 20020207 | WO 2001-EP8938   | 200108<br>02 |
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|                | W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW |          |                  |              |
|                | RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |          |                  |              |
| DE 10037629    |               | A1   | 20020214 | DE 2000-10037629 | 200008<br>02 |
|                |               |  |          | <--              |              |
| CA 2417421     |               | A1   | 20030130 | CA 2001-2417421  | 200108<br>02 |
|                |               |  |          | <--              |              |
| EP 1309634     |               | A1   | 20030514 | EP 2001-971853   | 200108<br>02 |
|                |               |  |          | <--              |              |
| EP 1309634     |               | B1   | 20061004 |                  |              |
|                | R:            | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR   |          |                  |              |
| JP 2004505127  |               | T  | 20040219 | JP 2002-515957   | 200108<br>02 |
|                |               |  |          | <--              |              |
| AT 341568      |               | T  | 20061015 | AT 2001-971853   | 200108<br>02 |
|                |               |  |          | <--              |              |
| ES 2269460     |               | T3   | 20070401 | ES 2001-971853   | 200108<br>02 |
|                |               |  |          | <--              |              |
| CZ 297813      |               | B6   | 20070404 | CZ 2003-578      | 200108<br>02 |
|                |               |  |          | <--              |              |
| US 20040024154 |               | A1   | 20040205 | US 2003-343102   | 200307       |

&lt;--

US 7238760 B2 20070703

PRAI DE 2000-10037629 A 20000802 <--

WO 2001-EP8938 W 20010802 <--

AB H2O-sol. or H2O-swellable copolymers which contain sulfo groups and are based on N-sulfoalkyl(meth)acrylamide derivs. and (meth)acrylamide or N-vinyl compds. (structures specified), useful as additives for aq. **construction materials** or for water-thinned paints and coatings, were manufd. The inventive copolymers also represent H2O retention agents which are effective, even when used in relatively small quantities, and which are compatible in **construction material** and paint systems of this type. For example, a solid gel was obtained by radical polymn. of partially neutralized (pH 6.0) mixt. of 2.17 mol 2-acrylamido-2-methylpropanesulfonic acid with N,N-dimethylacrylamide 0.83, (3-methacrylamidopropyl)trimethylammonium chloride 0.12 and Sipomer SEM 25 0.023 mol. The gel was dried, comminuted and added (0.16%) to a water-thinned ceramic tile adhesive to give H2O retention 99.1%, vs. 97.7 for a similar copolymer contg. polyethylene glycol methacrylate Me ether instead of Sipomer SEM 25.

ST polymer thickener manuf waterborne adhesive water retention; acrylamidomethylpropanesulfonic acid copolymer manuf water retention aid waterborne adhesive; **plaster** waterborne water retention aid acrylamidomethylpropanesulfonic acid copolymer manuf; polyoxyethylene tristyrylphenyl ether methacrylate copolymer water retention aid adhesive; gel polymn polyoxyethylene tristyrylphenyl ether methacrylate water retention aid

IT **Concrete**  
Thickening agents  
(manuf. of water-sol. or -swellable copolymers contg. sulfo groups as associative thickeners for **construction materials**)

IT **Lime** (chemical)  
(manuf. of water-sol. or -swellable copolymers contg. sulfo groups as associative thickeners for **construction materials**)

IT 395063-24-8P, 2-Acrylamido-2-methylpropanesulfonic acid-N,N-Dimethylacrylamide-(3-Methacrylamidopropyl)trimethylammonium chloride-Sipomer SEM 25 graft copolymer 395063-25-9P, Acrylamide-2-Acrylamido-2-methylpropanesulfonic acid-(3-Methacrylamidopropyl)trimethylammonium chloride-Sipomer SEM 25 graft copolymer 395063-26-0P, 2-Acrylamido-2-methylpropanesulfonic acid-3-(N,N-Dimethylaminopropyl)acrylamide-(3-Methacrylamidopropyl)trimethylammonium chloride-Sipomer SEM 25 graft copolymer 395063-27-1P, 2-Acrylamido-2-methylpropanesulfonic

acid-N,N-Dimethylacrylamide-Dimethyldiallylammonium chloride-Sipomer SEM 25 copolymer 395063-28-2P,  
 2-Acrylamido-2-methylpropanesulfonic  
 acid-3-(N,N-Dimethylaminopropyl)acrylamide-(3-Acrylamidopropyl)trimethylammonium chloride-Sipomer SEM 25 graft copolymer 395063-29-3P, 2-Acrylamido-2-methylpropanesulfonic  
 acid-N,N-Dimethylacrylamide-Dimethyldiallylammonium chloride-Sipomer BEM copolymer 395064-83-2P, 2-Acrylamido-2-methylpropanesulfonic  
 acid-N,N-dimethylacrylamide-(3-methacrylamidopropyl)trimethylammonium chloride-ethylene oxide graft copolymer ether with 2,4,6-tristyrylphenol 395064-85-4P,  
 2-Acrylamido-2-methylpropanesulfonic  
 acid-acrylamide-(3-methacrylamidopropyl)trimethylammonium chloride-ethylene oxide graft copolymer ether with 2,4,6-tristyrylphenol 395064-87-6P,  
 2-Acrylamido-2-methylpropanesulfonic  
 acid-(N,N-dimethylaminopropyl)acrylamide-(3-methacrylamidopropyl)trimethylammonium chloride-ethylene oxide graft copolymer ether with 2,4,6-tristyrylphenol 395064-89-8P,  
 2-Acrylamido-2-methylpropanesulfonic  
 acid-3-(N,N-dimethylaminopropyl)acrylamide-(3-acrylamidopropyl)trimethylammonium chloride-ethylene oxide graft copolymer ether with 2,4,6-tristyrylphenol

(manuf. of water-sol. or -swellable copolymers contg. sulfo groups as associative thickeners for construction materials)

IT 13397-24-5, Gypsum, uses 14798-04-0, Anhydrite  
 (manuf. of water-sol. or -swellable copolymers contg. sulfo groups as associative thickeners for construction materials)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

- (1) Peiffer, D; US 4608425 A 1986 HCA
- (2) Peiffer, D; US 4710555 A 1987 HCA
- (3) Peiffer, D; US 5068278 A 1991 HCA

IT 395063-26-0P, 2-Acrylamido-2-methylpropanesulfonic  
 acid-3-(N,N-Dimethylaminopropyl)acrylamide-(3-Methacrylamidopropyl)trimethylammonium chloride-Sipomer SEM 25 graft copolymer 395063-28-2P,  
 2-Acrylamido-2-methylpropanesulfonic  
 acid-3-(N,N-Dimethylaminopropyl)acrylamide-(3-Acrylamidopropyl)trimethylammonium chloride-Sipomer SEM 25 graft copolymer 395064-87-6P,  
 2-Acrylamido-2-methylpropanesulfonic  
 acid-(N,N-dimethylaminopropyl)acrylamide-(3-methacrylamidopropyl)trimethylammonium chloride-ethylene oxide graft copolymer ether with 2,4,6-tristyrylphenol 395064-89-8P,

2-Acrylamido-2-methylpropanesulfonic  
acid-3-(N,N-dimethylaminopropyl)acrylamide-(3-  
acrylamidopropyl)trimethylammonium chloride-ethylene oxide graft  
copolymer ether with 2,4,6-tristyrylphenol  
(manuf. of water-sol. or -swellable copolymers contg. sulfo  
groups as associative thickeners for **construction**  
**materials**)

RN 395063-26-0 HCA

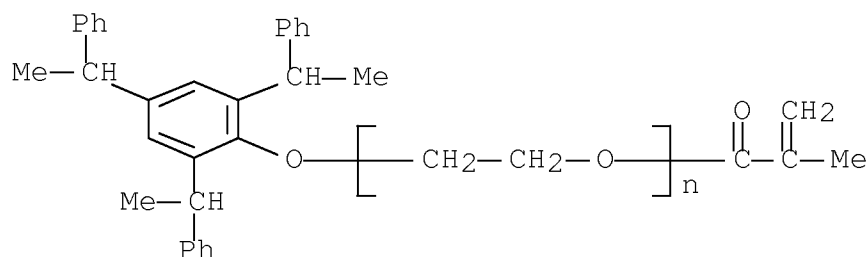
CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-  
propenyl)amino]-, chloride, polymer with  
N-[3-(dimethylamino)propyl]-2-propenamide,  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  
 $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[2,4,6-tris(1-  
phenylethyl)phenoxy]poly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX  
NAME)

CM 1

CRN 174200-85-2

CMF (C2 H4 O)<sub>n</sub> C34 H34 O2

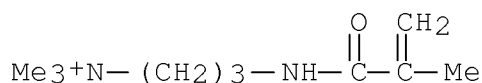
CCI PMS



CM 2

CRN 51410-72-1

CMF C10 H21 N2 O . Cl

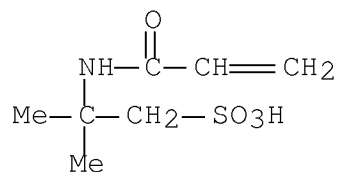


● Cl -

CM 3

CRN 15214-89-8

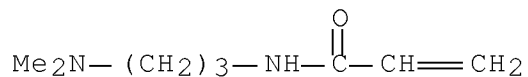
CMF C7 H13 N O4 S



CM 4

CRN 3845-76-9

CMF C8 H16 N2 O



RN 395063-28-2 HCA

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[2,4,6-tris(1-phenylethyl)phenoxy]poly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

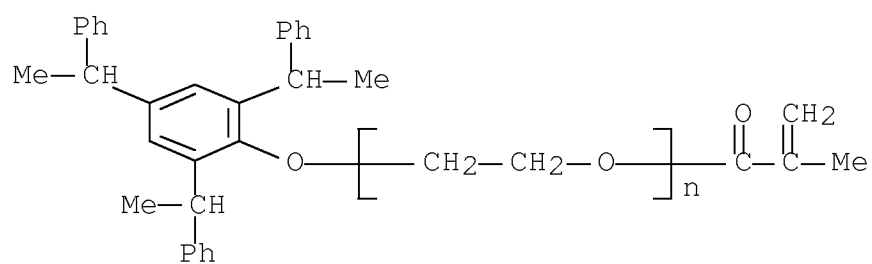
CM 1

CRN 174200-85-2

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CCI PMS

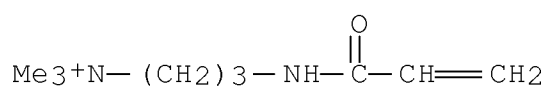




CM 2

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

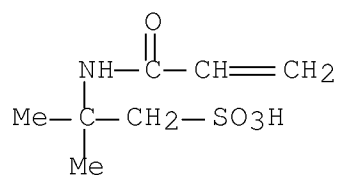


● Cl-

CM 3

CRN 15214-89-8

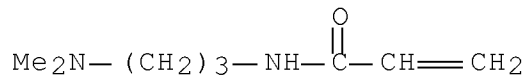
CMF C7 H13 N O4 S



CM 4

CRN 3845-76-9

CMF C8 H16 N2 O



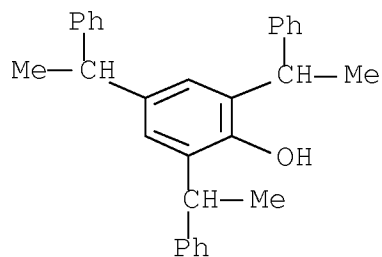
RN 395064-87-6 HCA

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and oxirane, 2,4,6-tris(1-phenylethyl)phenyl ether, graft (9CI) (CA INDEX NAME)

CM 1

CRN 18254-13-2

CMF C30 H30 O



CM 2

CRN 395064-86-5

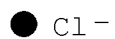
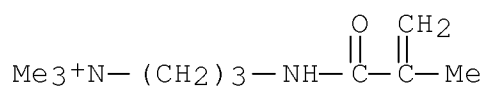
CMF (C10 H21 N2 O . C8 H16 N2 O . C7 H13 N O4 S . C2 H4 O . Cl)x

CCI PMS

CM 3

CRN 51410-72-1

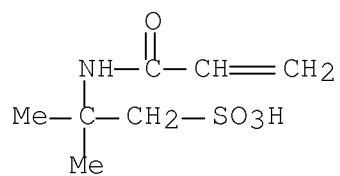
CMF C10 H21 N2 O . Cl



CM 4

CRN 15214-89-8

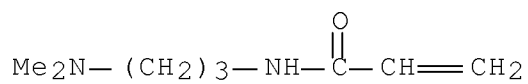
CMF C7 H13 N O4 S



CM 5

CRN 3845-76-9

CMF C8 H16 N2 O



CM 6

CRN 75-21-8

CMF C2 H4 O

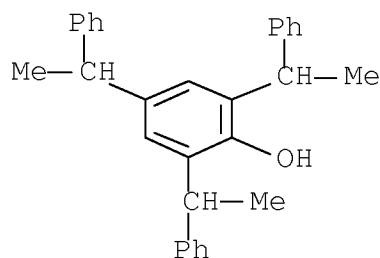


RN 395064-89-8 HCA  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and oxirane, 2,4,6-tris(1-phenylethyl)phenyl ether, graft (9CI) (CA INDEX NAME)

CM 1

CRN 18254-13-2

CMF C30 H30 O



CM 2

CRN 395064-88-7

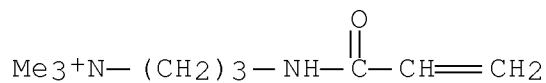
CMF (C9 H19 N2 O . C8 H16 N2 O . C7 H13 N O4 S . C2 H4 O . Cl)x

CCI PMS

CM 3

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

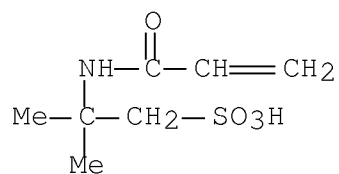


● Cl-

CM 4

CRN 15214-89-8

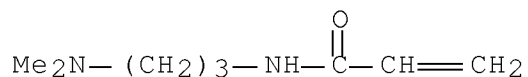
CMF C7 H13 N O4 S



CM 5

CRN 3845-76-9

CMF C8 H16 N2 O



CM 6

CRN 75-21-8

CMF C2 H4 O



L34 ANSWER 3 OF 3 HCA COPYRIGHT 2009 ACS on STN

AN 124:291739 HCA Full-text

OREF 124:54089a,54092a

ED Entered STN: 23 May 1996

TI Amphoteric polymers as absorbents for aqueous solutions of electrolytes

IN Ogura, Kunyoshi

PA Toyo Boseki, Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C08F020-36  
 ICS C08F020-58; C08F020-60; C08F026-06  
 CC 38-3 (Plastics Fabrication and Uses)  
 FAN.CNT 3

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|-------------|------|----------|-----------------|----------|
|    | -----       | ---- | -----    | -----           |          |
| PI | JP 08027225 | A    | 19960130 | JP 1994-160245  | 19940712 |
|    |             |      |          | <--             |          |
|    | KR 180022   | B1   | 19990515 | KR 1994-19121   | 19940802 |
|    |             |      |          | <--             |          |
|    | US 5512644  | A    | 19960430 | US 1994-302428  | 19940908 |

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PRAI JP 1993-223532 A 19930908 <--  
 JP 1994-37115 A 19940308 <--  
 JP 1994-160245 A 19940712 <--

AB The polymers, useful for diapers, construction materials, etc., are prepd. from amphoteric vinyl monomers 10-100, other vinyl monomers 0-90, and crosslinking monomers 0-1 mol %. Polymn. of N,N-dimethyl-N-(3-acrylamidopropyl)-N- (carboxymethyl)ammonium inner salt was polyemd. at 90° in H2O in the presence of ammonium persulfate gave a polymer showing H2O absorption 224 g/g, 0.9% aq. NaCl absorption 63 g/g, and artificial sea water absorption 58 g/g.

ST electrolyte aq soln absorbent amphoteric polymer; betaine acrylamide deriv polymer absorbent; diaper absorbent amphoteric polymer; acrylic deriv betaine polymer absorbent; polyelectrolyte cationic acrylic betaine absorbent

IT Absorbents  
 (acrylamidopropyl betaine polymers; prepn. and use as absorbents for aq. electrolyte solns.)

IT Polyelectrolytes  
 (cationic, betaine group-contg. acrylic polymers; prepn. and use as absorbents for aq. electrolyte solns.)

IT 79704-34-0P, (3-Acrylamidopropyl)(carboxymethyl)dimethylammonium hydroxide inner salt polymer 176092-95-8P,  
 (3-Acrylamidopropyl)(carboxymethyl)dimethylammonium hydroxide inner

salt-methylenebisacrylamide copolymer 176092-96-9P, Acrylic acid-(3-Acrylamidopropyl)(carboxymethyl)dimethylammonium hydroxide inner salt copolymer 176092-97-0P, Acrylamide-(3-Acrylamidopropyl)(carboxymethyl)dimethylammonium hydroxide inner salt copolymer ~~176092-98-1P~~, 2-Acrylamido-2-methylpropanesulfonic acid-(3-Acrylamidopropyl)(carboxymethyl)dimethylammonium hydroxide inner salt-methylenebisacrylamide copolymer 176092-99-2P, Acrylic acid-N,N-dimethyl-(3-methacrylamidopropyl)-N-(carboxymethyl)ammonium hydroxide inner salt copolymer 176093-00-8P, Acrylic acid-N,N-dimethyl-N-(2-methacryloyloxyethyl)-N-(carboxymethyl)ammonium hydroxide inner salt copolymer 176093-01-9P, Acrylic acid-N,N-dimethyl-N-(3-acrylamidopropyl)-N-(carboxyethyl)ammonium hydroxide inner salt copolymer (prepn. and use as absorbents for aq. electrolyte solns.)

IT ~~176092-98-1P~~, 2-Acrylamido-2-methylpropanesulfonic acid-(3-Acrylamidopropyl)(carboxymethyl)dimethylammonium hydroxide inner salt-methylenebisacrylamide copolymer (prepn. and use as absorbents for aq. electrolyte solns.)

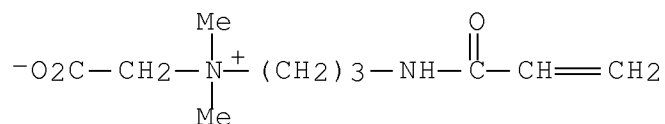
RN 176092-98-1 HCA

CN 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-, inner salt, polymer with N,N'-methylenebis[2-propenamide] and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 79702-44-6

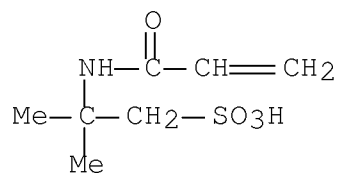
CMF C10 H18 N2 O3



CM 2

CRN 15214-89-8

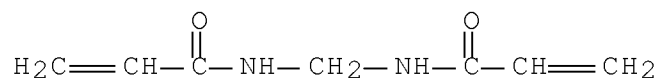
CMF C7 H13 N O4 S



CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



=> D L35 1-4 ALL HITSTR

L35 ANSWER 1 OF 4 HCA COPYRIGHT 2009 ACS on STN

AN 143:408023 HCA Full-text

ED Entered STN: 17 Nov 2005

TI Methods and compositions for use with spacer fluids used in subterranean well bores

IN Eoff, Larry S.; Reddy, B. Raghava; Dalrymple, Eldon D.

PA USA

SO U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S. Ser. No. 862,132.

CODEN: USXXCO

DT Patent

LA English

IC ICM E21B043-16

INCL 166305100

CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 38

FAN.CNT 4

|    | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE |
|----|----------------|------|----------|-----------------|------|
|    | -----          | ---- | -----    | -----           |      |
|    | -----          |      |          |                 |      |
| PI | US 20050230116 | A1   | 20051020 | US 2004-893210  |      |



200407  
16

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15

US 7114568 B2 20061003  
US 20040220058 A1 20041104 US 2004-862132

200406  
04

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PRAI US 2004-825001 A2 20040415  
US 2004-862132 A2 20040604  
US 2002-236722 A2 20020906 <--  
US 2004-806894 A2 20040323

AB The present invention relates to spacer fluids used in subterranean operations and, more particularly, to spacer fluids that comprise water-sol. relative permeability modifiers and methods of using the spacer fluids in subterranean operations. In one embodiment, the present invention provides a method of displacing a first fluid from a well bore that comprises introducing the first fluid into the well bore; and displacing the first fluid with a spacer fluid, the spacer fluid comprising water, and a water-sol. relative permeability modifier comprising a hydrophobically modified polymer or a hydrophilically modified polymer. In another embodiment, the present invention provides a spacer fluid that comprises water, and a water-sol. relative permeability modifier comprising a hydrophobically modified polymer or a hydrophilically modified polymer.

ST well spacer fluid

IT Brines  
(completion; methods and compns. for use with spacer fluids used in subterranean well bores)

IT **Cement**  
Drilling fluids  
(methods and compns. for use with spacer fluids used in subterranean well bores)

IT Well treatment fluids  
(spacer fluids; methods and compns. for use with spacer fluids used in subterranean well bores)

IT 25154-86-3DP, Poly(dimethylaminoethyl methacrylate), quaternized with alkyl derivs. 26655-25-4P, Acrylic acid-dimethylaminoethyl methacrylate copolymer 65291-67-0P, Acrylamide-octadecyl methacrylate copolymer 155796-23-9P  
(methods and compns. for use with spacer fluids used in subterranean well bores)

IT 79-06-1, Acrylamide, reactions 79-10-7, Acrylic acid, reactions  
79-39-0, Methacrylamide 79-41-4, Methacrylic acid, reactions

88-12-0, reactions 97-65-4, Itaconic acid, reactions 108-05-4,  
 Vinyl acetate, reactions 593-67-9, Vinyl amine 688-84-6,  
 2-Ethylhexylmethacrylate 818-61-1 1184-84-5, Vinyl sulfonic acid  
 1746-03-8, Vinyl phosphonic acid 2235-00-9, Vinyl caprolactam  
 2680-03-7, N,N-Dimethylacrylamide 2867-47-2, Dimethylaminoethyl  
 methacrylate 5039-78-1 6296-61-3, N,N-Diallylacetamide  
 9002-98-6 9003-05-8, Polyacrylamide 9004-34-6, Cellulose,  
 reactions 9005-25-8, Starch, reactions 9012-76-4, Chitosan  
 13162-05-5, N-Vinylformamide 15214-89-8, 2-Acrylamido-2-methyl  
 propane sulfonic acid 25104-18-1, Polylysine 25154-86-3,  
 Poly(dimethylaminoethyl methacrylate) 25377-73-5, Dodecenyl  
 succinic anhydride 25568-39-2, Acrylamide-dimethylaminoethyl  
 methacrylate copolymer 26336-38-9, Polyvinylamine 26680-54-6,  
 Octenyl succinic anhydride 26914-43-2, Styrene sulfonic acid  
 28675-43-6, Methacrylic acid-dimethylaminoethyl methacrylate  
 copolymer 28805-58-5, Octenyl succinic acid 29499-22-7, Vinyl  
 alcohol-vinylamine copolymer 29658-97-7, Dodecenyl succinic acid  
 48042-45-1D, halide derivs. 58710-34-2 59447-77-7 67296-21-3,  
 Dimethylaminopropyl methacrylamide 70502-55-5 82695-08-7,  
 Acrylamide-dimethylaminopropyl methacrylamide copolymer 87667-82-1  
 95734-95-5 ~~112593-05-2~~ 393110-04-8,  
 Polydimethylaminopropyl methacrylamide 781615-13-2 867060-97-7

(methods and compns. for use with spacer fluids used in  
 subterranean well bores)

IT 180908-70-7 406160-41-6 669015-11-6 866945-34-8  
 (methods and compns. for use with spacer fluids used in  
 subterranean well bores)

RE.CNT 150 THERE ARE 150 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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(144) Weaver; US 4460627 A 1984 HCA  
(145) Weaver; US 4532052 A 1985 HCA  
(146) Whipple; US 6627719 B2 2003 HCA  
(147) Williamson; US 5208216 A 1993 HCA  
(148) Xu; SPE 95746 2005  
(149) Zamora; US 20040171495 A1 2004 HCA  
(150) Zhou, Z; 46th Annual Technical Meeting of the Petroleum Society of  
CIM in Banff 1995

IT 112593-05-2

(methods and compns. for use with spacer fluids used in  
subterranean well bores)

RN 112593-05-2 HCA

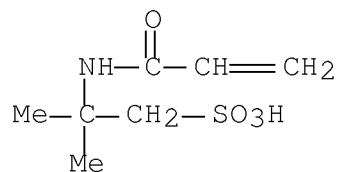
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer  
with 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonic acid

(CA INDEX NAME)

CM 1

CRN 15214-89-8

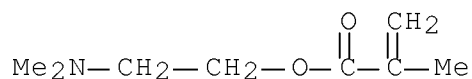
CMF C7 H13 N O4 S



CM 2

CRN 2867-47-2

CMF C8 H15 N O2



L35 ANSWER 2 OF 4 HCA COPYRIGHT 2009 ACS on STN  
AN 133:124217 HCA Full-text  
ED Entered STN: 18 Aug 2000  
TI **Cement** dispersants showing excellent water-reducing and  
slump retaining properties  
IN Takeda, Takeshi; Aoyama, Masahiro; Atsuji, Minoru  
PA Toagosei Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C04B024-26  
ICS C04B024-26; B01F017-56; C08F220-04; C08F226-02; C08F290-06;  
C04B103-40  
CC 58-1 (Cement, Concrete, and Related Building Materials)  
Section cross-reference(s): 38  
FAN.CNT 1

|    | PATENT NO.<br>----- | KIND<br>---- | DATE<br>----- | APPLICATION NO.<br>----- | DATE         |
|----|---------------------|--------------|---------------|--------------------------|--------------|
| PI | JP 2000203911       | A            | 20000725      | JP 1999-104217           | 199904<br>12 |

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PRAI JP 1998-304159      A      19981026      <--

AB    The dispersants contain copolymers comprising of monomers obtained by reaction of  $\alpha$ ,  $\beta$ -ethylenically unsatd. carboxylic acid (alkali salts) and isocyanates having ethylenically unsatd. double bonds, with glycidyl compds., amines, or alcs. having alkylene oxide side chains. The monomer may be  $R_1NHCO_2(R_2O)_nR_3$  ( $R_1$  = ethylenically unsatd. group;  $R_2$  = C2-4 alkylene;  $R_3$  = H, C1-50 alkyl, alkylphenyl;  $n$  = integer of 1-200). The dispersants show excellent water-reducing property and give cement compns. with low slump loss.

ST    acrylic graft polyoxyalkylene cement dispersant

IT    Cement (construction material)

Dispersing agents

(acrylic graft polyoxyalkylene as dispersants for cement compns.)

IT    Polyoxyalkylenes, preparation

(acrylic, graft; acrylic graft polyoxyalkylene as dispersants for cement compns.)

IT    Concrete modifiers

(dispersants; acrylic graft polyoxyalkylene as dispersants for cement compns.)

IT    284463-12-3P    284463-13-4P    284463-14-5P

(acrylic graft polyoxyalkylene as dispersants for cement compns.)

IT    284463-14-5P

(acrylic graft polyoxyalkylene as dispersants for cement compns.)

RN    284463-14-5    HCA

CN    2-Propenoic acid, polymer with

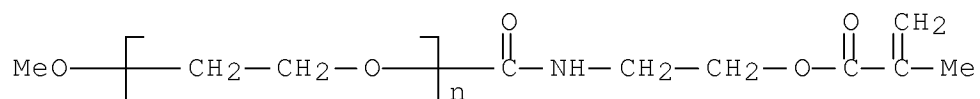
2-methyl-1-[(1-oxo-2-propenyl)amino]-2-propanesulfonic acid and  $\alpha$ -[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]- $\omega$ -methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM    1

CRN    118889-33-1

CMF    (C2 H4 O) $_n$  C8 H13 N O4

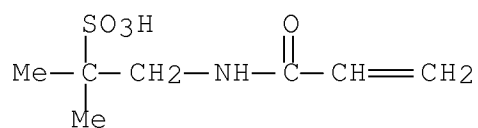
CCI    PMS



CM 2

CRN 74242-01-6

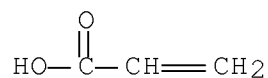
CMF C7 H13 N O4 S



CM 3

CRN 79-10-7

CMF C3 H4 O2



L35 ANSWER 3 OF 4 HCA COPYRIGHT 2009 ACS on STN

AN 131:355555 HCA Full-text

ED Entered STN: 17 Dec 1999

TI Modification of water-containing waste soil for recycling

IN Yamada, Satoshi; Nishibayashi, Hideyuki

PA Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09K017-22

ICS A01G001-00; A01G007-00; B01F007-00; C02F011-00; C02F011-14;  
E02D003-12; C09K103-00



CC 60-4 (Waste Treatment and Disposal)

Section cross-reference(s): 58

FAN.CNT 1

|    | PATENT NO.<br>-----<br>----- | KIND<br>---- | DATE<br>----- | APPLICATION NO.<br>----- | DATE         |
|----|------------------------------|--------------|---------------|--------------------------|--------------|
| PI | JP 11323335                  | A            | 19991126      | JP 1998-132203           | 199805<br>14 |

<--

PRAI JP 1998-132203 19980514 <--

AB The title soil from construction sites etc. is modified by mixing the soil with a soil modifier contg. a water-sol. polymer having cationic groups, granulating the obtained mixt., and adding a hydraulic substance into the obtained granules. Alternatively, the title soil is modified by mixing it with the modifier by using a horizontal or vertical mixing app. The obtained granules can be used as sand substitutes.

ST water contg waste soil modification recycling; sand substitute waste soil granulation recycling; polyacrylate modifier granulation waste soil

IT Granulation  
Recycling  
Soil amendments

(modification of water-contg. waste soil by mixing with water-sol. polymer as modifier and hydraulic substance for recycling)

IT ~~Lime~~ (chemical)  
(modification of water-contg. waste soil by mixing with water-sol. polymer as modifier and hydraulic substance for recycling)

IT ~~Cement~~ (construction material)  
(portland; modification of water-contg. waste soil by mixing with modifier and hydraulic substance for recycling)

IT Sand  
(substitute; modification of water-contg. waste soil by mixing with water-sol. polymer as modifier and hydraulic substance for recycling)

IT 1305-62-0, Slaked ~~lime~~, uses 13397-24-5, Gypsum  
, uses 26161-33-1 26336-38-9, Poly(vinyl amine) 35429-19-7  
54076-96-9 142280-25-9

(modification of water-contg. waste soil by mixing with water-sol. polymer as modifier and hydraulic substance for recycling)

IT 142280-25-9  
(modification of water-contg. waste soil by mixing with water-sol. polymer as modifier and hydraulic substance for

recycling)

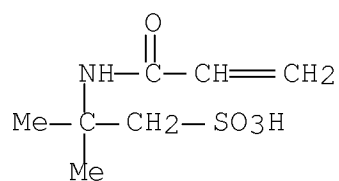
RN 142280-25-9 HCA

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

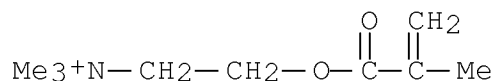


● Na

CM 2

CRN 5039-78-1

CMF C9 H18 N O2 . Cl



● Cl-

L35 ANSWER 4 OF 4 HCA COPYRIGHT 2009 ACS on STN

AN 131:170774 HCA Full-text

ED Entered STN: 18 Sep 1999

TI Preparation and use of water-soluble or water-swellaible copolymers containing sulfo groups

IN Albrecht, Gerhard; Huber, Christian; Schuhbeck, Manfred; Weichmann, Josef; Kern, Alfred

PA SKW Trostberg A.-G., Germany

SO Ger. Offen., 16 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C08F220-58

ICS C08F220-52; C08F220-34; C08F220-10; C04B024-26; C09D133-26;  
C09D133-14

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42, 58

FAN.CNT 1

|      | PATENT NO.   | KIND | DATE     | APPLICATION NO.  | DATE         |
|------|--|------|----------|------------------|--------------|
|      | -----  | ---- | -----    | -----            |              |
| PI   | DE 19806482  | A1   | 19990819 | DE 1998-19806482 | 199802<br>17 |
|      |  |      |          | <--              |              |
|      | CA 2262068   | A1   | 19990817 | CA 1999-2262068  | 199902<br>16 |
|      |  |      |          | <--              |              |
|      | CA 2262068   | C    | 20080617 |                  |              |
|      | EP 936228  | A1   | 19990818 | EP 1999-103065   | 199902<br>16 |
|      |  |      |          | <--              |              |
|      | EP 936228  | B1   | 20030723 |                  |              |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, |      |          |                  |              |
|      | PT, IE, SI, LT, LV, FI, RO                                     |      |          |                  |              |
|      | JP 11335426  | A    | 19991207 | JP 1999-37280    | 199902<br>16 |
|      |  |      |          | <--              |              |
|      | JP 4187859   | B2   | 20081126 |                  |              |
|      | US 6187887   | B1   | 20010213 | US 1999-250327   | 199902<br>16 |
|      |  |      |          | <--              |              |
|      | AT 245666  | T    | 20030815 | AT 1999-103065   | 199902<br>16 |
|      |  |      |          | <--              |              |
|      | ES 2205612   | T3   | 20040501 | ES 1999-103065   | 199902<br>16 |
|      |  |      |          | <--              |              |
| PRAI | DE 1998-19806482   | A    | 19980217 | <--              |              |

- AB The title copolymers, useful in hydraulic binders for use in construction and in aq. coatings, contain N-(sulfoalkyl)amido groups 3-96, amido or carbamyl groups 3-96, quaternary ammonium groups 0.05-75, and polyoxyalkylene ester or ether groups (all of specified structure) 0.01-50 mol%. Aq. redox polymn. of 2-acrylamido-2-methyl-1-propanesulfonic acid 99.4, N,N-dimethylacrylamide 207.9, [2-(methacryloyloxy)ethyl]trimethylammonium chloride 11, and polyethylene glycol Me ether methacrylate (mol. wt. 750) 1.7 mmol gave a viscous, 6.3% soln. of copolymer which was dried and milled to give 45 g hard, white granules. Use of the copolymers as binders for **cement**, **plaster** and **mortar** is exemplified.
- ST sulfonic acid copolymer binder; quaternary ammonium copolymer binder; amide copolymer binder; polyoxyalkylene copolymer binder; binder hydraulic ionic polymer; coating binder ionic polymer; **cement** binder ionic polymer; **mortar** binder ionic polymer
- IT Sulfonic acids, preparation  
(unsatd., copolymers with unsatd. amides, quaternary ammonium compds. and polyoxyalkylenes; prepn. and use of water-sol. or water-swellaable copolymers contg. sulfo groups)
- IT Quaternary ammonium compounds, preparation  
(unsatd., copolymers with unsatd. sulfonic acids, amides and polyoxyalkylenes; prepn. and use of water-sol. or water-swellaable copolymers contg. sulfo groups)
- IT Polyoxyalkylenes, preparation  
(unsatd., copolymers with unsatd. sulfonic acids, quaternary ammonium compds. and amides; prepn. and use of water-sol. or water-swellaable copolymers contg. sulfo groups)
- IT Amides, preparation  
(unsatd., copolymers with unsatd. sulfonic acids, quaternary ammonium compds. and polyoxyalkylenes; prepn. and use of water-sol. or water-swellaable copolymers contg. sulfo groups)
- IT Binders  
(water-sol. or water-swellaable copolymers contg. sulfo groups as hydraulic binders)
- IT **Cement** (construction material)  
(water-sol. or water-swellaable copolymers contg. sulfo groups as hydraulic binders for **cement**)
- IT **Mortar**  
(water-sol. or water-swellaable copolymers contg. sulfo groups as hydraulic binders for **mortar**)
- IT **Plaster**  
(water-sol. or water-swellaable copolymers contg. sulfo groups as hydraulic binders for **plaster**)
- IT Coating materials  
(water-thinned; water-sol. or water-swellaable copolymers contg. sulfo groups as binders for coatings)

IT 238098-13-0P 238098-14-1P 238098-15-2P  
238098-16-3P 238098-17-4P 238098-18-5P  
238098-19-6P

(prepn. and use of water-sol. or water-swella-  
ble copolymers  
contg. sulfo groups)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Anon; EP 0157055 A3 HCA
- (2) Anon; EP 0157055 A2 HCA
- (3) Anon; EP 0196689 A1 HCA
- (4) Anon; EP 0217608 A2 HCA
- (5) Anon; EP 0291590 A1 HCA
- (6) Anon; EP 0648823 A1 HCA
- (7) Anon; JP 09087576 A HCA
- (8) Anon; JP 09111180 A HCA
- (9) Anon; DE 19608910 A1 HCA
- (10) Anon; DE 3302168 A1 HCA
- (11) Anon; DE 3402935 C2 HCA
- (12) Anon; DE 3707627 C2 HCA
- (13) Anon; DE 3905915 A1 HCA
- (14) Anon; DE 3932440 A1 HCA
- (15) Anon; US 4674574 HCA
- (16) Anon; US 4741843 HCA
- (17) Anon; US 5025040 HCA
- (18) Anon; US 5294651 HCA
- (19) Anon; WO 8500802 A1 HCA
- (20) Anon; WO 9217417 A1 HCA

IT 238098-13-0P 238098-14-1P 238098-15-2P  
238098-16-3P 238098-17-4P 238098-18-5P  
238098-19-6P

(prepn. and use of water-sol. or water-swella-  
ble copolymers  
contg. sulfo groups)

RN 238098-13-0 HCA

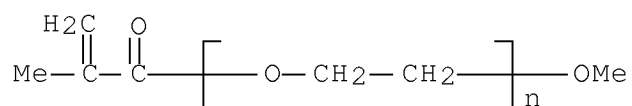
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,  
methyl sulfate, polymer with N,N-dimethyl-2-propenamide,  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  
 $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -methoxypoly(oxy-1,2-  
ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)<sub>n</sub> C5 H8 O2

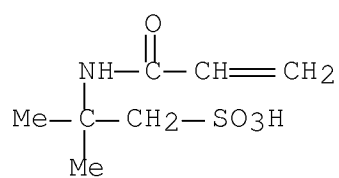
CCI PMS



CM 2

CRN 15214-89-8

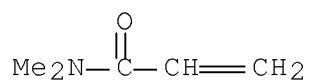
CMF C7 H13 N O4 S



CM 3

CRN 2680-03-7

CMF C5 H9 N O



CM 4

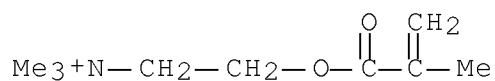
CRN 6891-44-7

CMF C9 H18 N O2 . C H3 O4 S

CM 5

CRN 33611-56-2

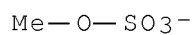
CMF C9 H18 N O2



CM 6

CRN 21228-90-0

CMF C H3 O4 S



RN 238098-14-1 HCA

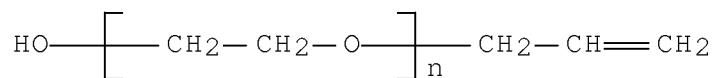
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and  $\alpha$ -2-propenyl- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (9CI)  
(CA INDEX NAME)

CM 1

CRN 27274-31-3

CMF (C2 H4 O)<sub>n</sub> C3 H6 O

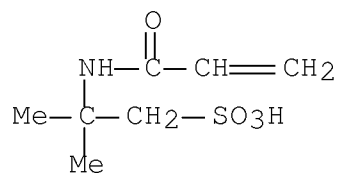
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CM 2

CRN 15214-89-8

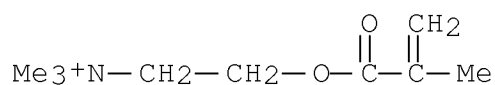
CMF C7 H13 N O4 S



CM 3

CRN 5039-78-1

CMF C9 H18 N O2 . Cl

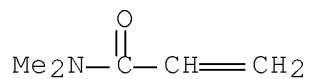


● Cl<sup>-</sup>

CM 4

CRN 2680-03-7

CMF C5 H9 N O



RN 238098-15-2 HCA

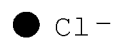
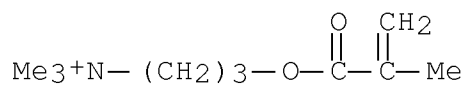
CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with N,N-dimethyl-2-propenamide,  $\alpha$ -ethenyl- $\omega$ -methoxypoly(oxy-1,2-ethanediyl) and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 55918-38-2



CMF C10 H20 N O2 . Cl

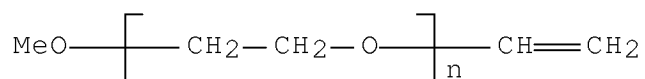


CM 2

CRN 50856-25-2

CMF (C2 H4 O)<sub>n</sub> C3 H6 O

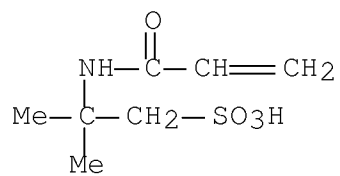
CCI PMS



CM 3

CRN 15214-89-8

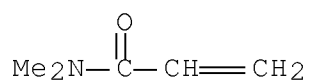
CMF C7 H13 N O4 S



CM 4

CRN 2680-03-7

CMF C5 H9 N O



RN 238098-16-3 HCA

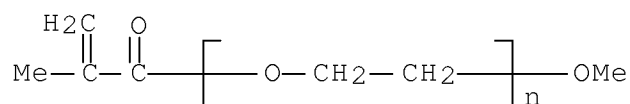
CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -methoxypoly(oxy-1,2-ethanediyl) and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)<sub>n</sub> C5 H8 O2

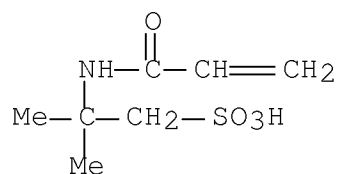
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CM 2

CRN 15214-89-8

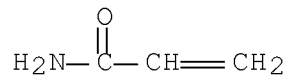
CMF C7 H13 N O4 S



CM 3

CRN 79-06-1

CMF C3 H5 N O



CM 4

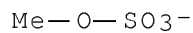
CRN 13106-44-0

CMF C8 H16 N O2 . C H3 O4 S

CM 5

CRN 21228-90-0

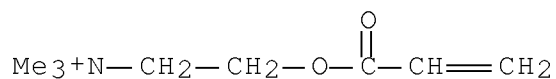
CMF C H3 O4 S



CM 6

CRN 20284-80-4

CMF C8 H16 N O2



RN 238098-17-4 HCA

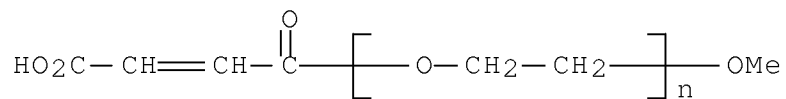
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with  $\alpha$ -(2Z)-3-carboxy-1-oxo-2-propenyl)- $\omega$ -methoxypoly(oxy-1,2-ethanediyl), 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 31833-82-6

CMF (C2 H4 O)<sub>n</sub> C5 H6 O4

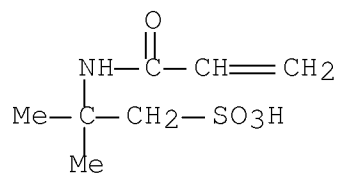
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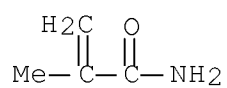
CMF C7 H13 N O4 S



CM 3

CRN 79-39-0

CMF C4 H7 N O



CM 4

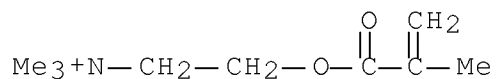
CRN 6891-44-7

CMF C9 H18 N O2 . C H3 O4 S

CM 5

CRN 33611-56-2

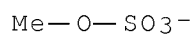
CMF C9 H18 N O2



CM 6

CRN 21228-90-0

CMF C H3 O4 S



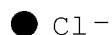
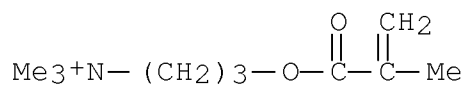
RN 238098-18-5 HCA

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with  $\alpha$ -ethenyl- $\omega$ -methoxypoly(oxy-1,2-ethanediyl), N-ethenyl-N-methylacetamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 55918-38-2

CMF C10 H20 N O2 . Cl

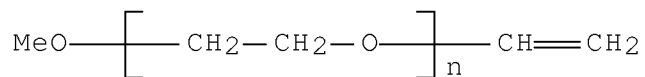


CM 2

CRN 50856-25-2

CMF (C2 H4 O)<sub>n</sub> C3 H6 O

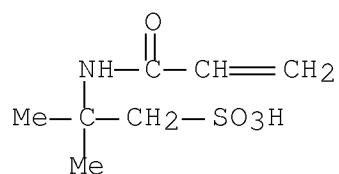
CCI PMS



CM 3

CRN 15214-89-8

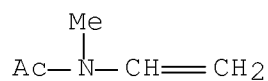
CMF C7 H13 N O4 S



CM 4

CRN 3195-78-6

CMF C5 H9 N O



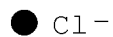
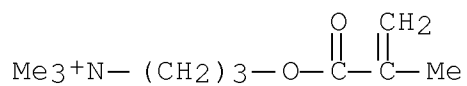
RN 238098-19-6 HCA

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with  $\alpha$ -ethenyl- $\omega$ -methoxypoly(oxy-1,2-ethanediyl), 1-ethenyl-2-pyrrolidinone and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 55918-38-2

CMF C10 H20 N O2 . Cl

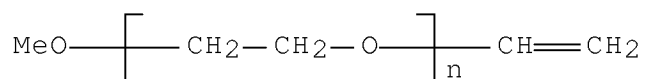


CM 2

CRN 50856-25-2

CMF (C2 H4 O)<sub>n</sub> C3 H6 O

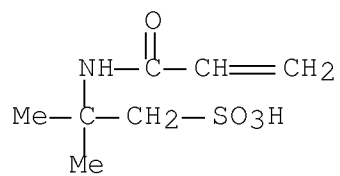
CCI PMS



CM 3

CRN 15214-89-8

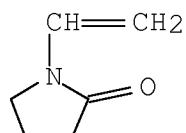
CMF C7 H13 N O4 S



CM 4

CRN 88-12-0

CMF C6 H9 N O



=> D L36 1-41 TI

L36 ANSWER 1 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Synthetic polymeric thickeners for cosmetics

L36 ANSWER 2 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Dry strengthening agents for paper

L36 ANSWER 3 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Paper of high bursting strength, sizes and (meth)acrylamide polymers therefor, and preparation thereof

L36 ANSWER 4 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Lithium ion conducting gel electrolyte and secondary polymer electrolyte lithium ion battery

L36 ANSWER 5 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Production of antifouling coatings containing biocide-impregnated polymeric gel beads

L36 ANSWER 6 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Acrylamide polymer-based coating composition for improving the interlayer adhesion in papermaking

L36 ANSWER 7 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Thermoreversible hydrogels XIII: synthesis and swelling behaviors of [N-isopropylacrylamide-co-sodium 2-acrylamido-2-methylpropyl sulfonate-co-N,N-dimethyl(acrylamido propyl) ammonium propane sulfonate] copolymeric hydrogels. [Erratum to document cited in CA133:310364]

L36 ANSWER 8 OF 41 HCA COPYRIGHT 2009 ACS on STN

TI Poly(sodium 2-acrylamido-2-methyl-1-propane sulfonate-co-(3-methacrylamidipropyl) trimethyl ammonium chloride) hydrogels



L36 ANSWER 9 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Preparation of polyampholytes for laundry applications

L36 ANSWER 10 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Molecular dynamics study of single/multichain coulomb polymers and the effects of salt ions

L36 ANSWER 11 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Thermoreversible hydrogels XIII: synthesis and swelling behaviors of [N-isopropylacrylamide-co-sodium 2-acrylamido-2-methylpropyl sulfonate-co-N,N-dimethyl(acrylamido propyl) ammonium propane sulfonate] copolymeric hydrogels

L36 ANSWER 12 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Dye monomers and their polymers for color toners or ink-jet printing inks

L36 ANSWER 13 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI First Order Phase Transition and Evidence for Frustrations in Polyampholytic Gels

L36 ANSWER 14 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Passivated porous polymer supports and methods for their preparation and use

L36 ANSWER 15 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Swelling, structure, and elasticity of polyampholyte hydrogels

L36 ANSWER 16 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Antifogging coatings with good transparency, strength, and adhesion and their formation on transparent substrates

L36 ANSWER 17 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Polymer and solution ion shielding in polyampholytic hydrogels

L36 ANSWER 18 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Volume phase transitions of polyampholyte gels

L36 ANSWER 19 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Electrically conductive adhesive hydrogels

L36 ANSWER 20 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Polyampholytic Hydrogel Swelling Transitions: Limitations of the Debye-Hueckel Law

L36 ANSWER 21 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI The properties of polyampholyte microgel particles prepared by

microemulsion polymerization

- L36 ANSWER 22 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Separation of molecules from dilute solutions using composite chromatography media having high dynamic sorptive capacity at high flow rates.
- L36 ANSWER 23 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Amphoteric vinyl polymers absorbing aqueous electrolyte solutions
- L36 ANSWER 24 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Passivated porous polymer supports and methods for the preparation and use of same
- L36 ANSWER 25 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Amphoteric N-substituted acrylamide hydrogel and method
- L36 ANSWER 26 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Passivated porous supports for immobilization or chromatographic separation of biologicals
- L36 ANSWER 27 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Poly(meth)acrylate ester-based hydrogel adhesives for use in biomedical devices
- L36 ANSWER 28 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Passivated and stabilized porous supports and methods for the preparation and use of same
- L36 ANSWER 29 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Bleachable polymeric filter dyes
- L36 ANSWER 30 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Hydrophobically modified acrylic copolymers for hair conditioners
- L36 ANSWER 31 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Superabsorbent crosslinked ampholytic ion-pair copolymers
- L36 ANSWER 32 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Superabsorbent crosslinked ampholytic ion pair copolymers
- L36 ANSWER 33 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Amphoteric hydrogel for medical devices and iontophoresis
- L36 ANSWER 34 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Manufacture of acrylic resins with high alcohol absorption

L36 ANSWER 35 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Crosslinked acrylamide-diethylaminoethyl methacrylate copolymers and their use as thickening agents for cosmetics

L36 ANSWER 36 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Electrostatic potential and polarity at the molecular surface of polyelectrolytes as probed by pH-sensitive chromophores covalently attached to the main chain

L36 ANSWER 37 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Syntheses and some spectroscopic properties of polyanions with pendant merocyanine dyes

L36 ANSWER 38 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Solution properties of ampholytic ionomers in organic solvents

L36 ANSWER 39 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Stabilizing fines contained in subterranean formations

L36 ANSWER 40 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Cationic ampholytic tetrapolymers for hair preparations

L36 ANSWER 41 OF 41 HCA COPYRIGHT 2009 ACS on STN  
TI Liquid detergent composition